

Building Name Address	Use (as per FSA Annexed Table 1)	Date and Time of Incident	Structure and Stories Area	Extent of Damage (Damaged Area/ Total Area)	No. of Casualties
Sennari Hostel  1-8-20 Oginochaya, Nishinari-ku, Osaka City, OSAKA	Hostel (5) a	March 10, 1975	Semi-fire resistive, 7 stories above ground and 0 below	[AIII], Half, Partial. Small  1,501 m <sup>2</sup>  (100%)	Fatalities 4  Injured 61 ( )
		Breakout at 06:16 (approx) Detected at 06:20 Notified by fire emergency dedicated telephone line Extinguished by 12:58			

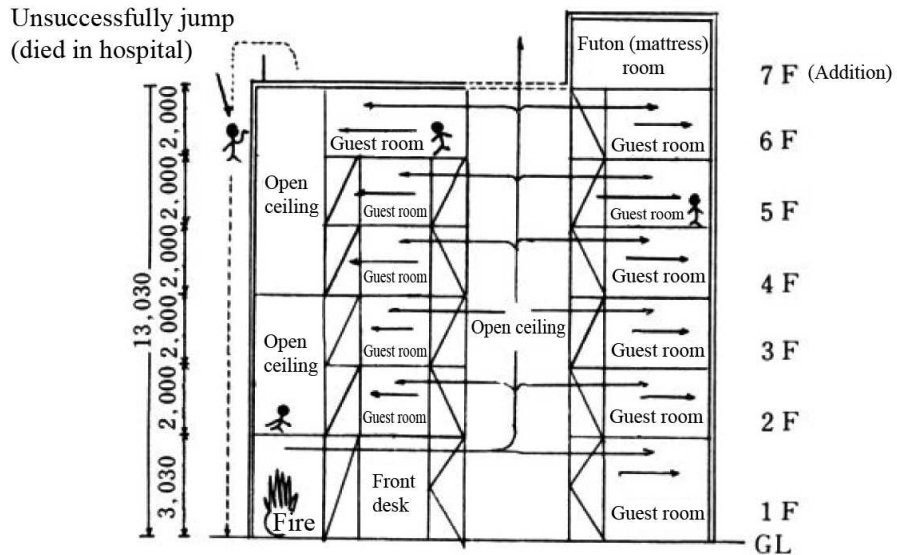
### I. Summary of Fire Incident

(1) Summary	This hostel fire occurred early in the morning in Japan's largest slum (Airinchiku). The fire started from a guest room located next to the main entrance on the 1st floor, and because of this fire location, approximately 180 guests had to find an alternative exit. In the mass confusion that follows, some guests jumped from the roof or ran up to the rooftop. This fire resulted in 4 fatalities and 61 injuries and exposed the vulnerabilities unique to a hostel in the aspects of fire prevention and hotel security in a dangerous neighborhood.							
	(2) Conditions per Floor	Floor	Total area	Damaged area	Use (Purpose)	No. of persons	No. of fatalities	Fire escape equipment
		m <sup>2</sup>	m <sup>2</sup>				2 sets of inside spiral stairs (1st to roof, 1st to 6th floors)	Fire extinguishers 1 indoor fire hydrant per floor Automatic fire detection system
7		64.0	64.0	Futon mattress storage		1 (Jumped to death from roof)		
6		239.5	239.5	Guest rooms	16	1	2 sets of fixed ladders (1st to 6th floors)	Emergency alarm system (PA system) Guiding lights 1 set of water pipe connections (3rd to 7th floors)
5		239.5	239.5	Guest rooms	19	1		
4		239.5	239.5	Guest rooms	40			
3		239.5	239.5	Guest rooms	42			
2		239.5	239.5	Guest rooms	40	1		
(1)		239.0	239.5	Front desk, Guest rooms	28			
Total	1,501.0	1,501.0		185	4			
(3) Origin of Fire	(Floor, Room, Part, Combustibles, Habitable/Non-habitable rooms, Present/Absent) <u>From a guest room next to the main entrance on the 1st floor</u> The average size of a guest room was 2 m <sup>2</sup> (just enough to sleep), which was partitioned by plywood and a door. This small room contained combustible material such as <i>futon</i> mattresses, and the windows of all rooms were covered by wire mesh to prevent break-ins, theft, or breakage from thrown stones.				(4) Cause of Fire	<u>Unknown</u> The cause of the fire is believed to be either a burning cigarette, an unattended heater, or arson; however, there is no proof to determine the exact cause.		

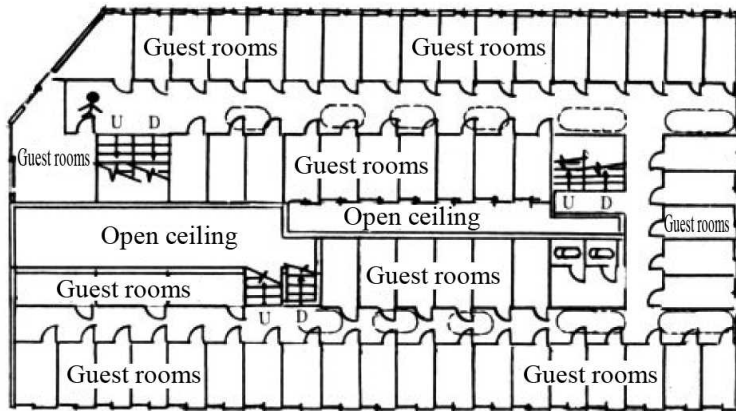
<b>(5) Fire Propagation Path</b>	<div style="display: flex; justify-content: space-around; text-align: center;"> <div style="border: 1px solid black; padding: 5px; width: 20%;">(Location of Fire Source)</div> <div style="border: 1px solid black; padding: 5px; width: 20%;">(Propagation from Source)</div> <div style="border: 1px solid black; padding: 5px; width: 20%;">(Propagation to Adjacent Zones)</div> <div style="border: 1px solid black; padding: 5px; width: 20%;">(Propagation to Other Floors)</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; width: 20%;">From a guest room next to the main entrance on the 1st floor</div> <div style="border: 1px solid black; padding: 5px; width: 20%;">Combustible material inside the room</div> <div style="border: 1px solid black; padding: 5px; width: 20%;">Partition walls</div> <div style="border: 1px solid black; padding: 5px; width: 20%;">Stairwell and open ceiling that were not protected by a fire compartment system</div> </div>			
	<p>The fire room on the 1st floor was close to the main entrance and stairwell, and therefore the fire spread quickly to the upper floors through the stairwell and open ceiling area on even-numbered floors, which were not protected by fire compartment systems. The plywood partition walls also facilitated the spread of fire.</p> <ul style="list-style-type: none"> <li>○ Main Reasons for Propagation of the Fire <ul style="list-style-type: none"> <li>◦ The fire room was next to the stairwell without a fire compartment, and therefore the fire spread rapidly to the upper floors.</li> <li>◦ The open ceilings were not protected either, and the plywood partitioned walls facilitated the propagation of fire.</li> </ul> </li> <li>○ Smoke Propagation Path <ul style="list-style-type: none"> <li>◦ Through the stairwell that had no smoke/fire compartment</li> <li>◦ Through the open ceilings in the hallway</li> </ul> </li> </ul>			
<b>II. Summary of the Building</b>				
<b>(1) Built</b>	Construction, Completion, and Major Renovations			
<b>Fire Prevention Management</b>	<b>(2) Vertical Shafts</b>		<b>(3) Fire Prevention</b>	
	Stairwells <input checked="" type="checkbox"/> Duct spaces <input type="checkbox"/> Elevators <input type="checkbox"/> Pipe shafts <input type="checkbox"/> Escalators <input type="checkbox"/> Other (    ) <input checked="" type="checkbox"/>		<p>The owner and fire-prevention manager were not much concerned about fire prevention and undertook no fire drills and no training to employees.</p>	
<p>There was 1 through stairs on each side (east and west) of the floor, but these stairs had no fire compartments.</p>				
<b>(4) Fire Compartment</b>		<b>(5) Firefighting Equipment</b>		
<p>This building consisted of 3 stories, but each story was divided into 2 floors to create 6 floors in total. So, the odd-numbered floors were made of steel deck plate, whereas the even-numbered floors were made of plywood and steel frame. Because of this configuration, each hallway had some 7 to 10 sections of open ceilings (size of 0.5 m x 1.3 m approx.) throughout the building, and none of them were protected by fire compartment systems.</p>		<p>When the fire broke out, no-one heard the alarm of the automatic fire detection system because the audio alarm was switched to "OFF".</p>		



<b>(5) Evacuation</b>	Means of Escape (No. of Persons)	Obstacles to Evacuation
	<ul style="list-style-type: none"> <li>◦ Stairs [ X ] ( )</li> <li>◦ Elevators/Escalators [ ] ( )</li> <li>◦ Escape equipment [ ] ( )</li> <li>◦ Directly to ground from windows or openings [ X ] ( )</li> <li>◦ Rescued [ X ] ( 33 )</li> <li>◦ Other ( ) [ ] ( )</li> </ul>	<ul style="list-style-type: none"> <li>◦ No windows [ ]</li> <li>◦ Barred openings [ ]</li> <li>◦ Locked emergency doors (Exits) [ ]</li> <li>◦ Alarm system [ ] (Poorly controlled, Malfunctioned, Not installed)</li> <li>◦ Power outage [ ]</li> <li>◦ Other [ ]</li> </ul>
<p>In conditions of the intense fire and smoke ascending the stairwells and along the open ceilings, most of the guests escaped via the stairs next to the bathroom on the east side, by using fixed ladders, and via the main entrance. However, in the disturbed beehive-like conditions, it was impossible for every single guest to escape via the narrow stairs in a short period. Therefore, those who were far from the stairs or slow in noticing the fire evacuated by unusual means, such as jumping from the windows to the ground or to an adjacent building, climbing down utility structures, or going up to the roof. A total of 33 persons were rescued by firefighters, including 25 who were rescued from the rooftop by ladder trucks.</p>		
<b>(6) Casualties</b>	Healthy individuals 3 (Drunk persons person ) Individuals in need of assistance 1 Infants Elderly 1 Handicapped Patients/ill persons	Obstacles to Evacuation
		<ul style="list-style-type: none"> <li>◦ No windows [ ]</li> <li>◦ Barred openings [ ]</li> <li>◦ Locked emergency doors (Exits) [ ]</li> <li>◦ Alarm system [ ] (Poorly controlled, Malfunctioned, Not installed)</li> <li>◦ Power outage [ ]</li> <li>◦ Other [ ]</li> </ul>
<ul style="list-style-type: none"> <li>◦ In this fire, 4 persons lost the chance to evacuate. Of these, 3 were burned to death: 1 (age 85) in a 2nd-floor guest room, 1 (age 25) in a 6th-floor guest room, and 1 (age unknown) near the window of the 5th-floor hallway. They were probably trapped by smoke.</li> <li>◦ The 4th person (age 52) escaped to the rooftop at first and tried to jump onto a utility pole to climb down, but on this attempt, he fell to the ground and died later in hospital.</li> </ul>		
<b>IV. Issues and Lessons Learned</b>		
<ol style="list-style-type: none"> <li>1. It is the hostel owners' responsibility to ensure the safety of guests. All hotel owners need to know that filing paper work (e.g. by a fire prevention manager) does not satisfy the responsibilities that they have to the guests. All people involved including the owner need to realize that they are accountable and respect their duties in fire prevention.</li> <li>2. The faulty fire compartments around the stairwell and the floors caused the fire and smoke to spread quickly and resulted in many casualties. Therefore, without delay, fire compartment systems need to be inspected and any faulty portions corrected.</li> <li>3. All of the windows were covered by mesh wire and the entrance was locked. Although such measures may be necessary for security reasons (break-in and theft), such an object or barrier could affect evacuation and firefighting operations, and therefore an alternative solution is needed.</li> <li>4. To be able to secure the safety of guests in the early stage of a fire, building management should proactively be involved in the safety measures and install an emergency exit, adequate fire compartment on the stairwell, an outside set of stairs and an escape bridge to an adjacent building.</li> <li>5. Building management should provide a fire prevention seminar and training to employees so that the existing firefighting equipment can be used effectively in case of an emergency.</li> </ol>		

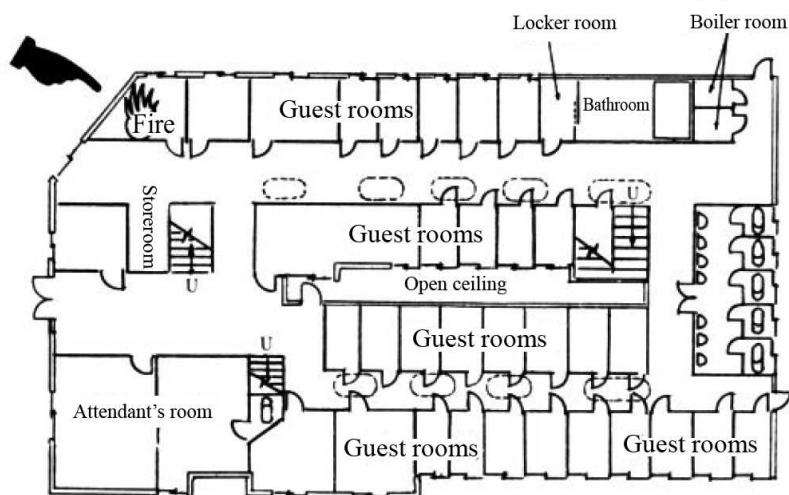


Note: The odd-number floors were made of steel plate (deck plate). Therefore, each hallway had some open ceilings (approx. size of 0.5 m x 1.3 m), total of 7 to 10 sections throughout the building and none of them had fire compartments. (Odd-number floors) The fatality locations are estimate.



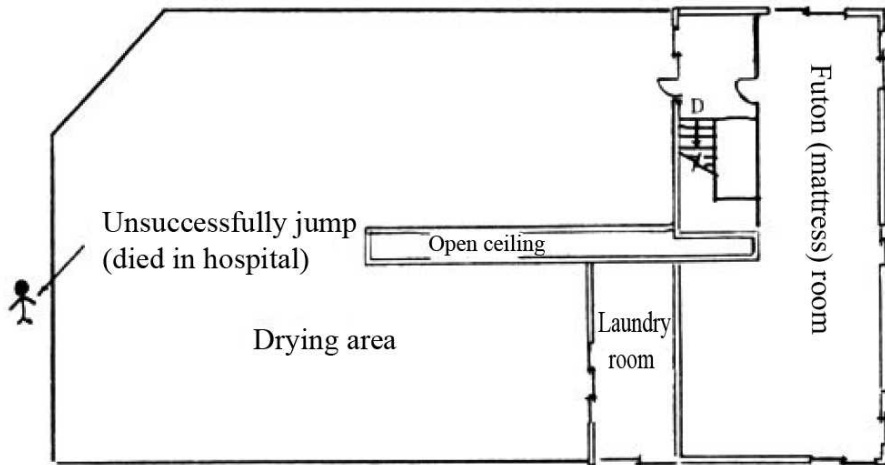
2nd floor

○ Indicates portions of open ceiling

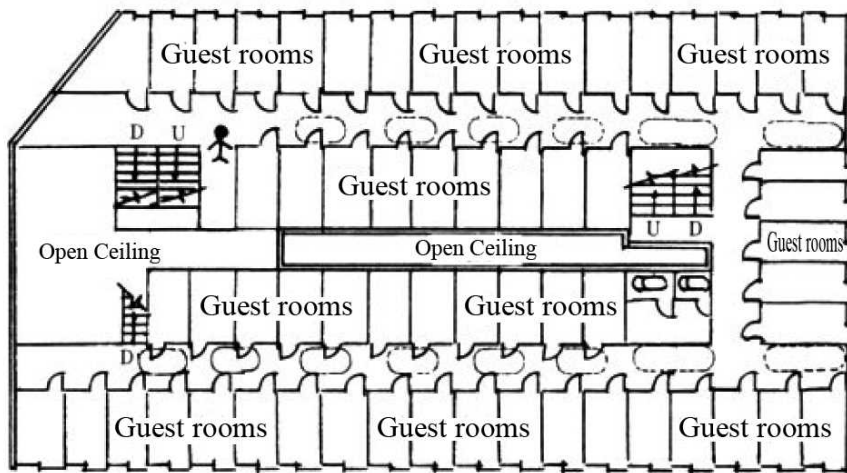


1st Floor

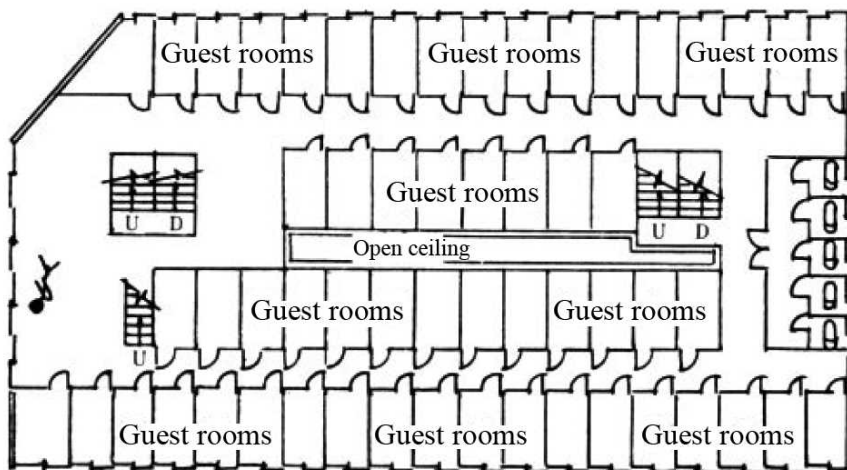
○ Indicates portion of open ceiling



7th Floor



Open Ceiling 6th Floor



5th Floor